

BRICKWORK DIMENSIONS

METRIC STANDARD BRICK: 230 x 110 x 76 mm
JOINTS: 10 mm VERTICAL GAUGE: 7 courses = 600 mm

No. of Bricks	Length	Opening	Height	No. of Bricks	Length	Opening	Height
1	230	250	86	26	6230		2229
1 1/2	350	370		26 1/2	6350		
2	470	490	172	27	6470		2314
2 1/2	590	610		27 1/2	6590		
3	710	730	257	28	6710		2400
3 1/2	830	850		28 1/2	6830		
4	950	970	343	29	6950		2486
4 1/2	1070	1090		29 1/2	7070		
5	1190	1210	429	30	7190		2572
5 1/2	1310	1330		30 1/2	7310		
6	1430	1450	514	31	7430		2657
6 1/2	1550	1570		31 1/2	7550		
7	1670	1690	600	32	7670		2743
7 1/2	1790	1810		32 1/2	7790		
8	1910	1930	686	33	7910		2829
8 1/2	2030	2050		33 1/2	8030		
9	2150	2170	772	34	8150		2914
9 1/2	2270	2290		34 1/2	8270		
10	2390	2410	857	35	8390		3000
10 1/2	2510	2530		35 1/2	8510		
11	2630	2650	943	36	8630		3086
11 1/2	2750	2770		36 1/2	8750		
12	2870	2890	1029	37	8870		3172
12 1/2	2990	3010		37 1/2	8990		
13	3110	3130	1114	38	9110		3257
13 1/2	3230	3250		38 1/2	9230		
14	3350	3370	1200	39	9350		3343
14 1/2	3470	3490		39 1/2	9470		
15	3590	3610	1286	40	9590		3429
15 1/2	3710	3730		40 1/2	9710		
16	3830	3850	1372	41	9830		3514
16 1/2	3950	3970		41 1/2	9950		
17	4070	4090	1457	42	10070		3600
17 1/2	4190	4210		42 1/2	10190		
18	4310	4330	1543	43	10310		3686
18 1/2	4430	4450		43 1/2	10430		
19	4550	4570	1629	44	10550		3772
19 1/2	4670	4690		44 1/2	10670		
20	4790	4810	1714	45	10790		3857
20 1/2	4910	4930		45 1/2	10910		
21	5030	5050	1800	46	11030		3943
21 1/2	5150	5170		46 1/2	11150		
22	5270	5290	1886	47	11270		4029
22 1/2	5390	5410		47 1/2	11390		
23	5510	5530	1972	48	11510		4114
23 1/2	5630	5650		48 1/2	11630		
24	5750	5770	2057	49	11750		4200
24 1/2	5870	5890		49 1/2	11870		
25	5990	6010	2143	50	11990		4286
25 1/2	6110			100	23990		8572

4.6.2 Maximum slenderness of masonry members

For robustness, the slenderness of a masonry member shall be as follows:

(a) For isolated piers—

$$\frac{H}{t_r} \leq C_v \quad \dots 4.6.2(1)$$

(b) For walls spanning vertically—

$$\frac{H}{k_t t_r} \leq C_v \quad \dots 4.6.2(2)$$

(c) For walls with at least one vertical edge laterally supported and $\frac{L_r}{t_r} \leq C_h$ —

$$\frac{H}{t_r} = \text{No limit} \quad \dots 4.6.2(3)$$

(d) For walls with at least one vertical edge laterally supported and $\frac{L_r}{t_r} > C_h$ —

$$\frac{H}{t_r} \leq C_v + \frac{C_h}{L_r - C_h t_r} \quad \dots 4.6.2(4)$$

where

H = the clear height of a member between horizontal lateral supports, in metres; or

= for a member without top horizontal support, the overall height from the bottom lateral support, in metres

t_r = the minimum thickness of the member, in metres

= in cavity-wall construction, the minimum thickness of the thicker leaf or two-thirds the sum of the thicknesses of the two leaves, whichever is greater, in metres

= in diaphragm wall construction, the overall thickness of the wall, in metres

k_t = a thickness coefficient, values as given in Table 7.2

C_v, C_h = robustness coefficients, values as given in Table 4.2 for edge restraints at top, bottom and vertical sides (either separately or in combination)

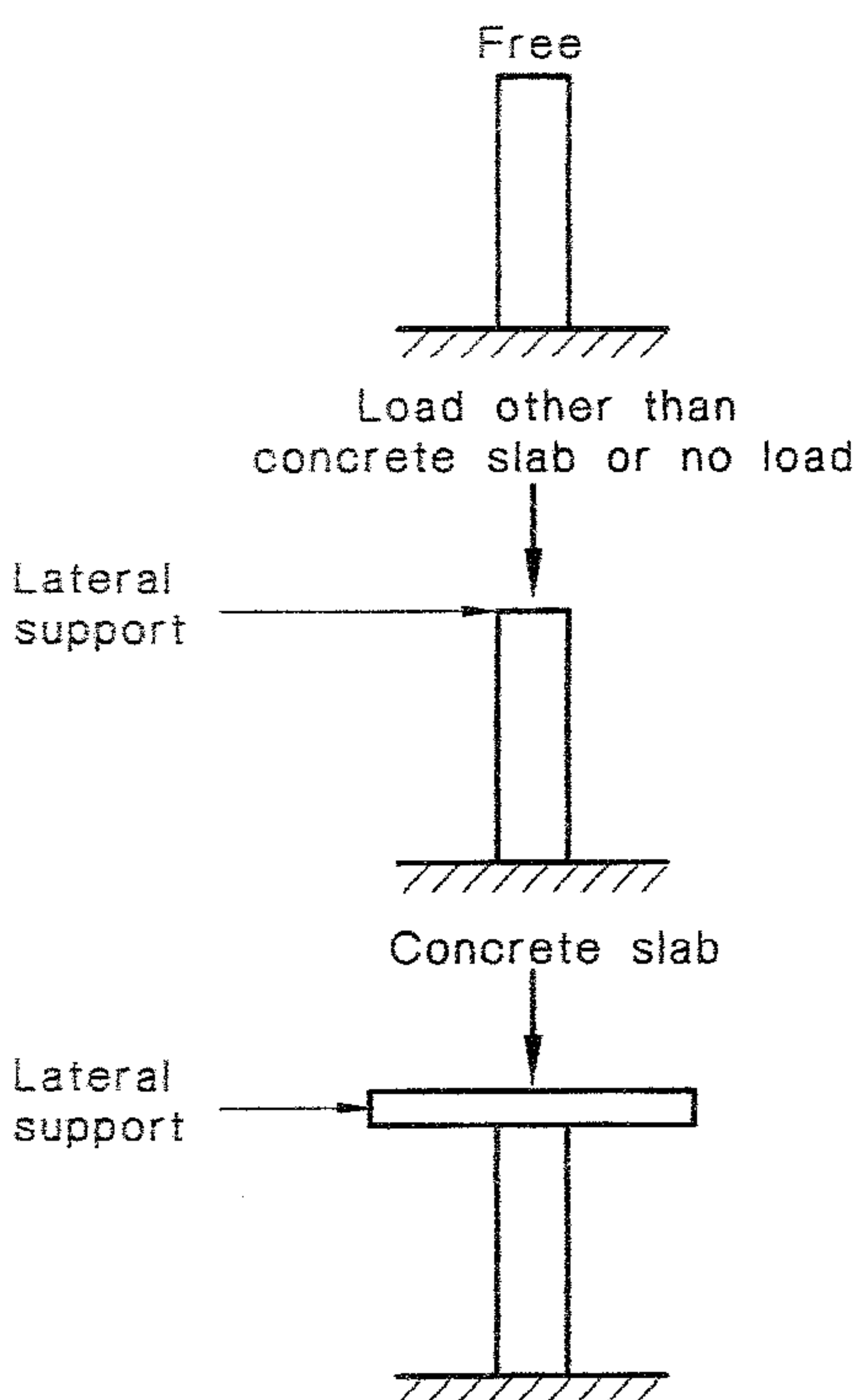
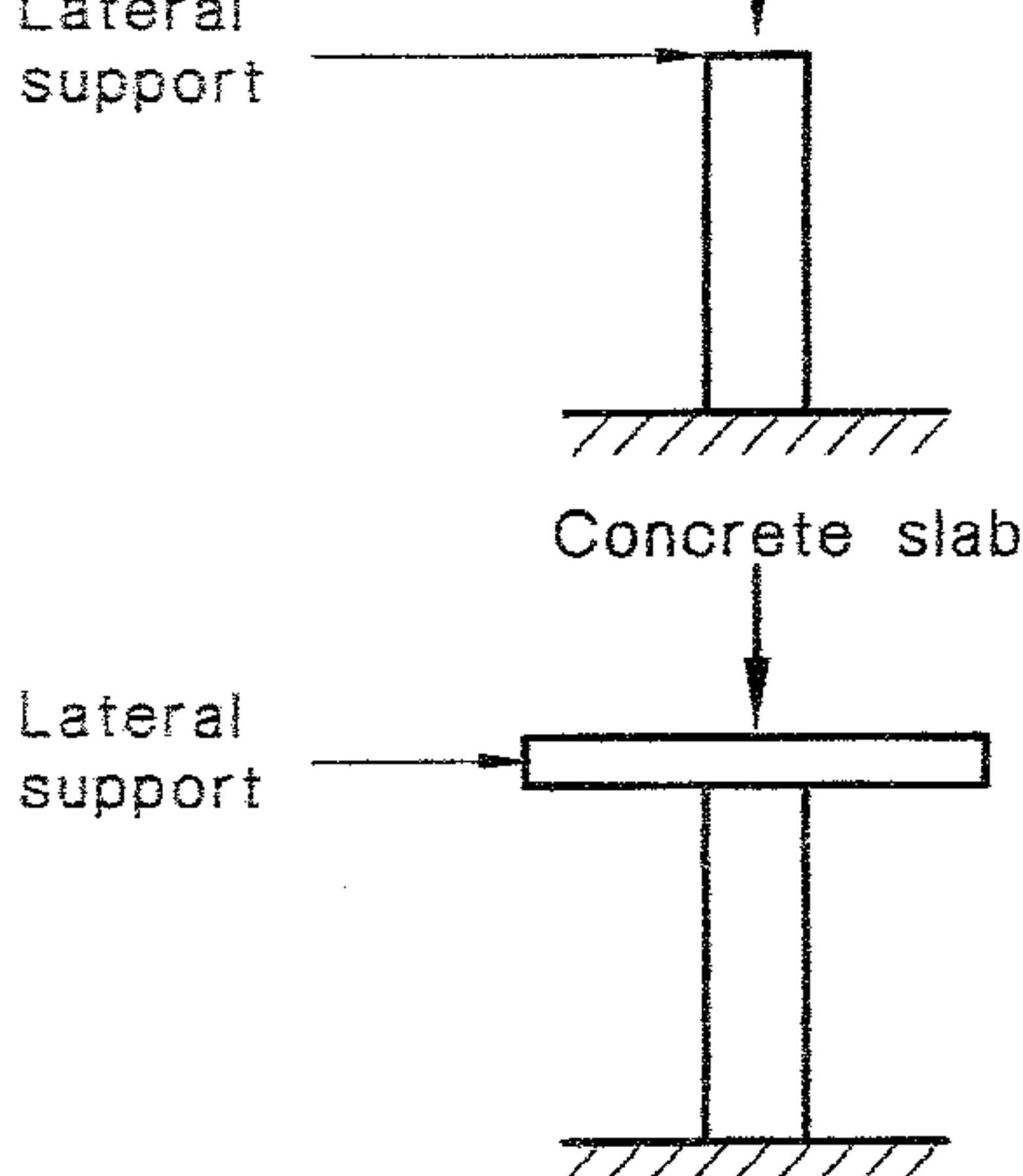
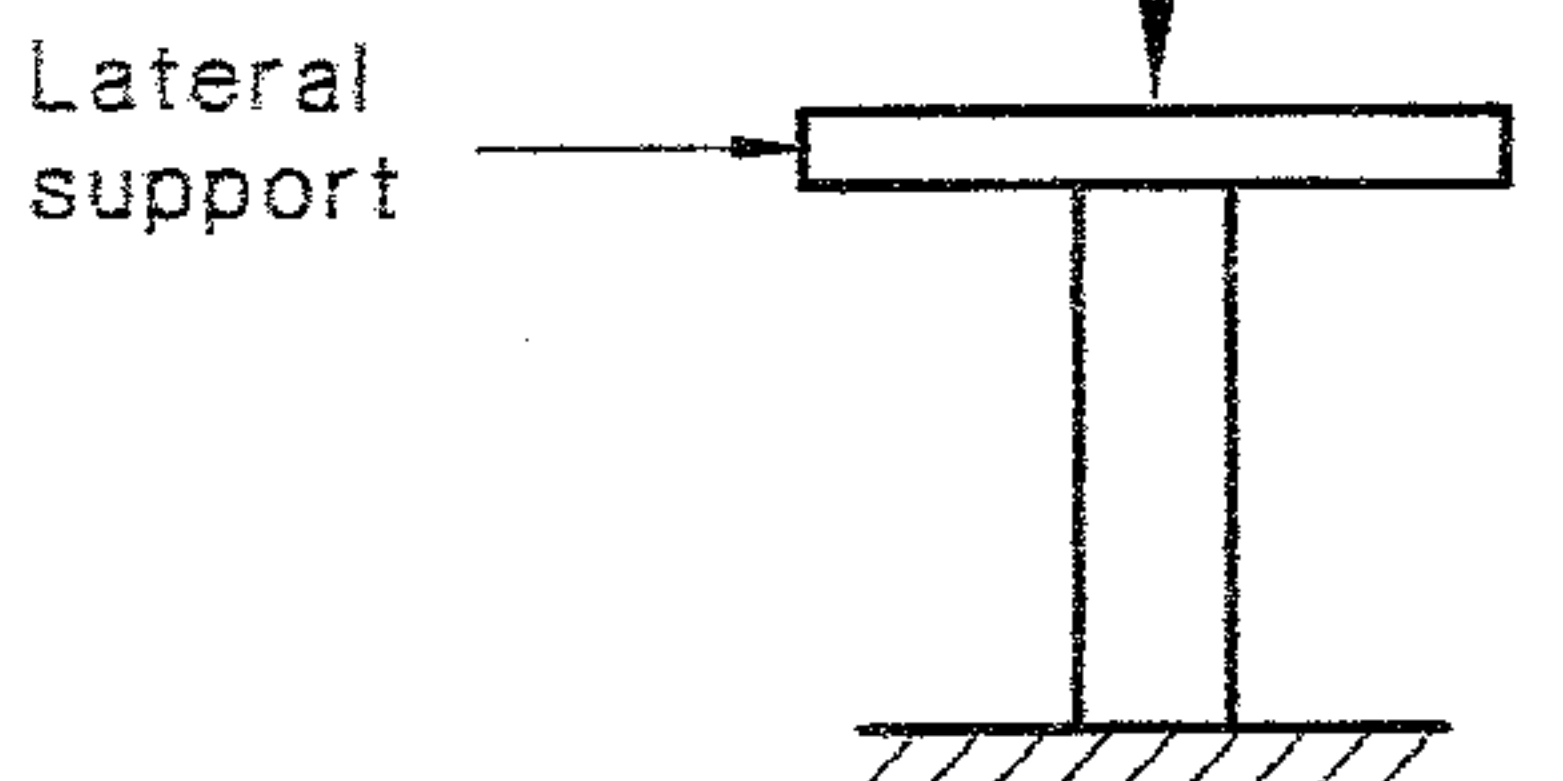
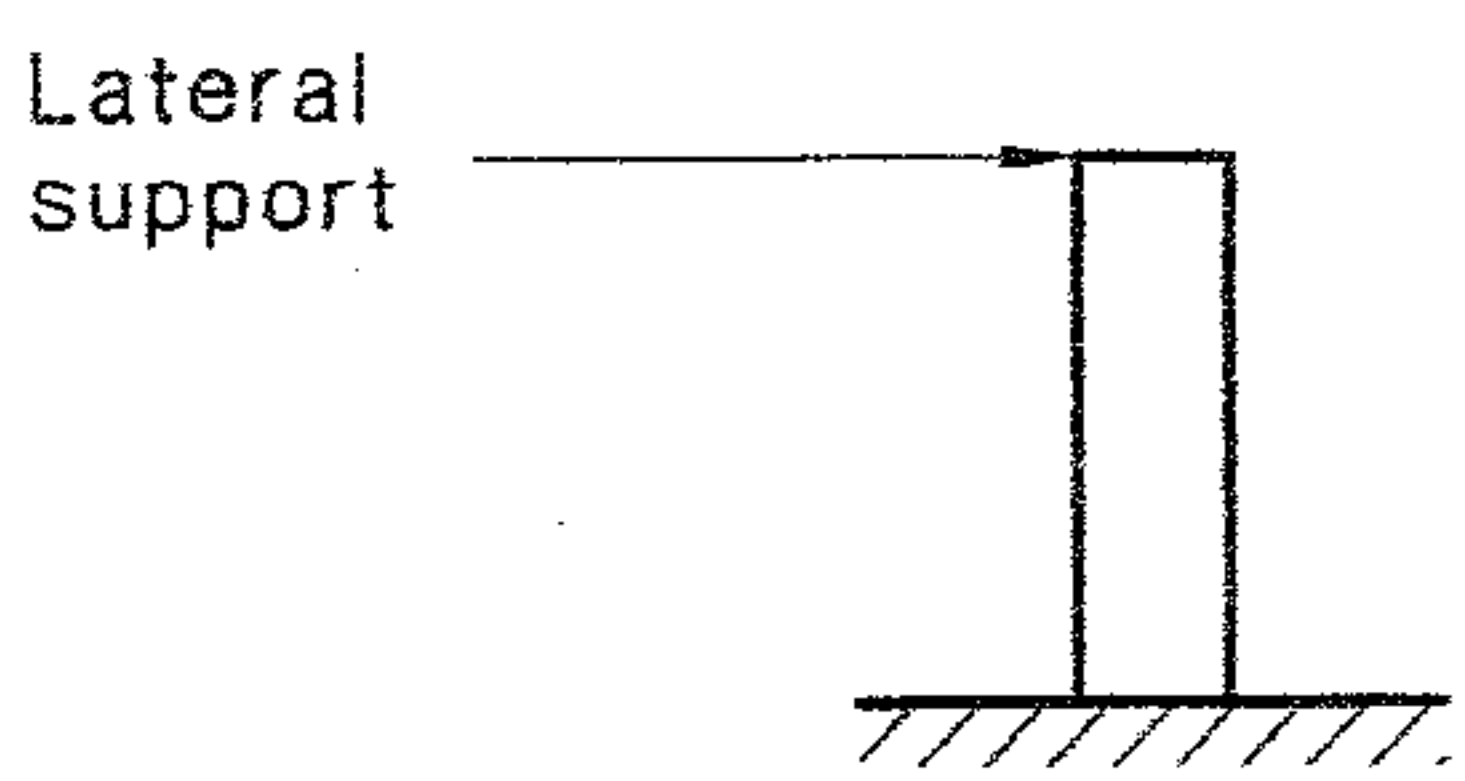


L_r = the clear length of a wall between vertical lateral supports; or

= for a wall without a vertical support at one end or at a control joint or for walls containing openings, the length to that unsupported end or control joint or edge of opening

A control joint in a wall, or an edge to an opening in a wall, shall be regarded as an unsupported edge to that wall unless specific measures are taken to provide adequate lateral support at that edge.

The robustness of walls of geometric section can be checked by determining an equivalent thickness of rectangular section from first principles and applying the provisions of this Clause.

TABLE 4.2
ROBUSTNESS COEFFICIENTS FOR WALLS AND ISOLATED PIERS

Top and bottom edge restraints to wall panels	C_v	
	Vertically unreinforced	Vertically reinforced or prestressed
	6	12 with reinforcement continuous into support. Otherwise 6
	27	36
	36	48
Isolated piers		
	13.5	30
Edge restraints on vertical sides of wall panels	C_h	
	Horizontally unreinforced	Horizontally reinforced or prestressed
	12	24 with reinforcement continuous past support. Otherwise 16
	36	48

NOTE: For this Table, reinforcement means complying with the reinforcement requirements of Clause 8.5, and prestressed means complying with the prestressing requirements of Clause 9.5 for bending in the